

Influenza Surveillance Report

www.infectiousdisease.dhh.louisiana.gov

Week 30: 7/21/13 - 7/27/13

The Influenza Surveillance Summary Report describes the results of the tracking done by the Louisiana Office of Public Health Infectious Disease Epidemiology Section (IDEpi). This report relies on data supplied by sentinel surveillance sites, including hospital emergency department (ED), laboratories and physicians' offices. Sentinel sites provide weekly data on Influenza Like Illness (ILI) and/or laboratory confirmed cases.

Taken together, ILI surveillance and laboratory surveillance provide a clear picture of the influenza activity occurring in Louisiana each week. If you have any questions about our surveillance system or would like more information, please contact Julie Hand at 504-568-8298 or julie.hand@la.gov.

ILI is defined as an illness characterized by cough and/or cold symptoms and a fever of 100° F or greater in the absence of a known cause. While not every case of ILI is a case of influenza, the CDC has found that trends in ILI from sentinel sites are a good proxy measure of the amount of influenza activity in an area. For this reason, all states and territories participating in the national surveillance program monitor weekly ILI ratios from their sentinel surveillance sites.



Laboratory testing: Not all sentinel sites have access to laboratory testing. However, many hospitals and physicians' offices do perform some influenza testing. Sites that test for influenza report the number of positive tests each week and the total number of tests performed each week. This information is included on page 3 of this report.

Influenza-like illness remains low in Louisiana. Monthly reports over the summer will include Louisiana data and a page with updates on H7N9, Middle East Respiratory Syndrome Coronavirus (MERS-CoV), and H3N2v. CDC produces an abbreviated report over the summer which is available at: www.cdc.gov/flu/weekly. The first weekly report of the 2013-2014 season (week 40, ending October 5, 2013) will be released on October 11, 2013.

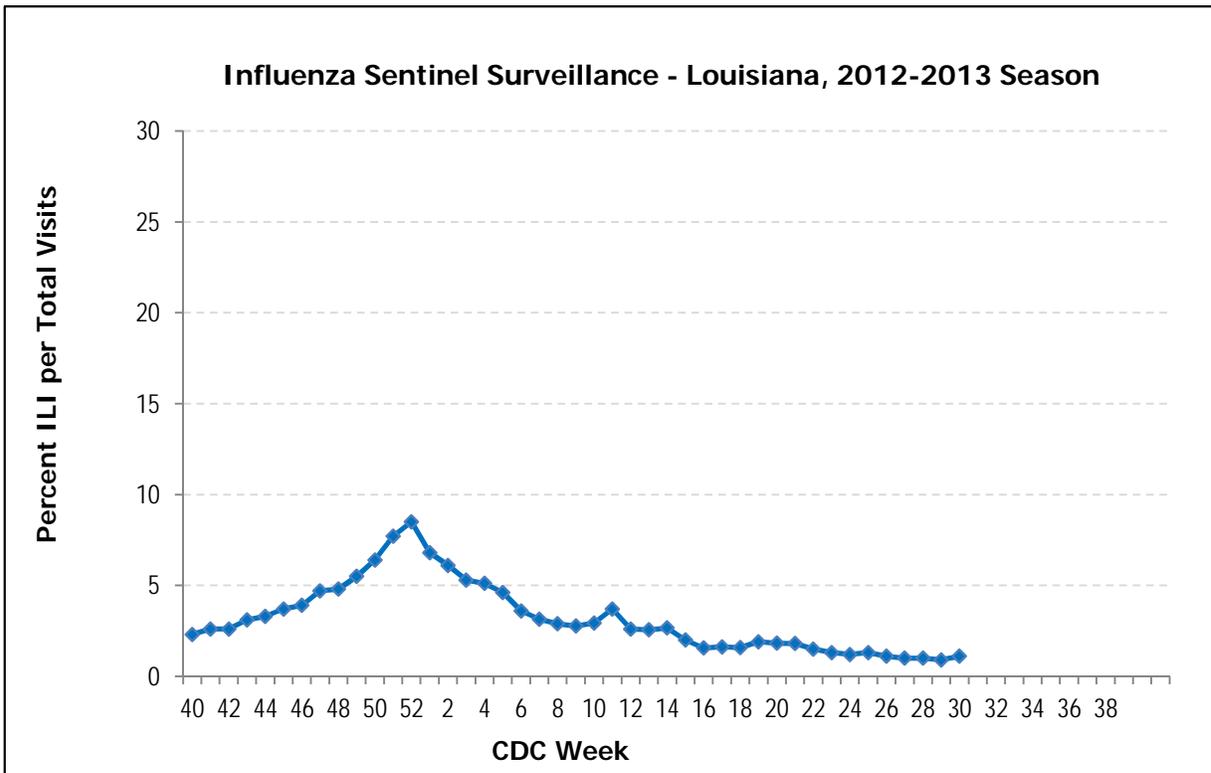
Page 2 : ILI Activity

Page 3: Louisiana Activity

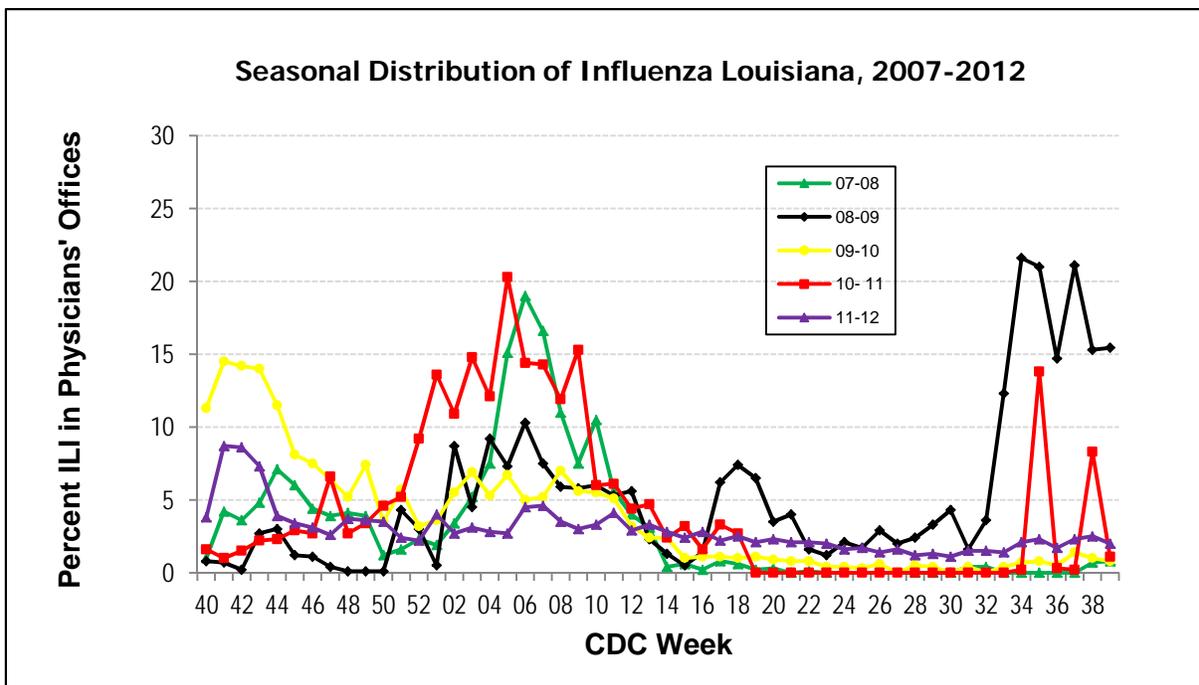
Page 4: H7N9 & MERS-CoV Updates

2012-2013 Season

This graph shows the percentage of visits for ILI over the total number of visits for sentinel surveillance sites. This is the best approach to estimate the magnitude of influenza transmission. ILI counts do include some viral infections other than influenza, but experience over the last 50 years has shown that this approach is a reliable method to estimate influenza transmission. It does not show which strain of influenza virus is responsible. The page on lab surveillance does show the proportion of specimens attributable to each virus strain.

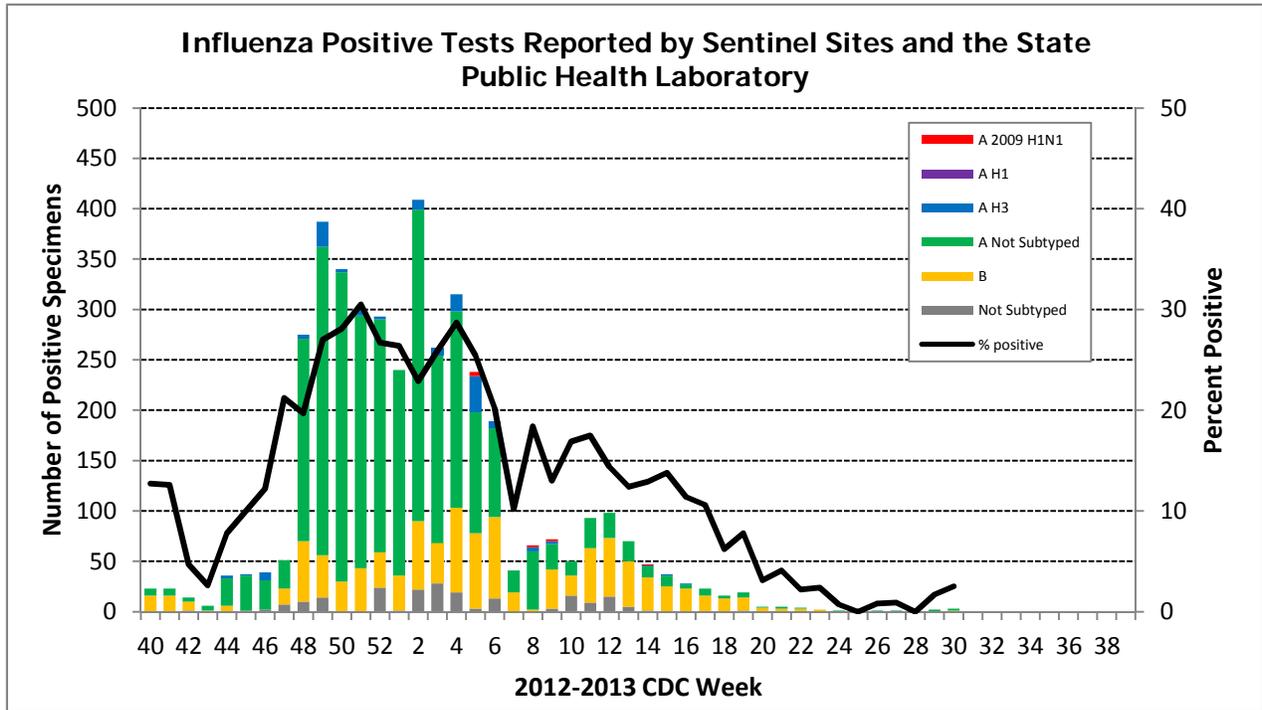


This graph shows the data on ILI surveillance among sentinel physicians' over the past 5 seasons to enable comparisons with previous years and better estimate the amplitude of this season's influenza transmission.



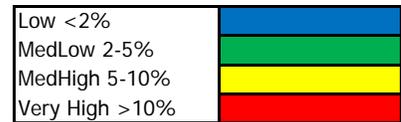
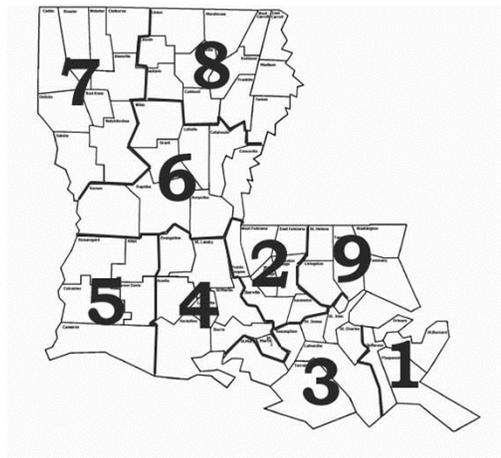
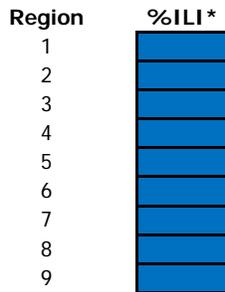
2012-2013 Season

Virologic Surveillance



Sentinel site testing is based on rapid test results. All subtyping is done by PCR at the State Lab.

Geographical Distribution of ILI



* %ILI over the last 4 weeks based on sentinel surveillance data

H7N9

- As of July 20, 2013, there have been 134 cases and 46 deaths.
- The decline in new cases may be a result of control measures implemented in China – including closure of live bird markets – or it may be a result of a seasonal pattern previously seen with other avian influenza viruses.
- CDC H7N9 website: <http://www.cdc.gov/flu/avianflu/h7n9-virus.htm>

Middle East Respiratory Syndrome Coronavirus (MERS-CoV)

- MERS-CoV is a virus that is new to humans; it is associated with respiratory illness and high death rates.
- Infections of the virus originate in the areas of the Arabian Peninsula and have been occurring since April of 2012.
- As of August 1, 2013 there have been 94 cases and 46 deaths in 8 countries.
- This coronavirus is most similar to those found in bats.
- It is not the same coronavirus that caused SARS in 2003. However, like SARS, MERS-CoV has caused severe acute respiratory illness and pneumonia in most reported cases. A small number of mild cases have been reported.
- MERS-CoV has been shown to spread person to person through close contact.
- The source of MERS-CoV is not known.
- There is no vaccine or specific antiviral treatment for MERS-CoV.
- CDC MERS-CoV website: <http://www.cdc.gov/features/novelcoronavirus>

H3N2v

- H3N2v is a non-human influenza virus that normally circulates in pigs and has infected humans.
- This variant virus with the matrix (M) gene from the 2009 H1N1 pandemic virus were first detected in people in July 2011.
- In 2011, 12 cases of H3N2v were detected in the United States.
- In 2012, 309 cases of H3N2v infection across 12 states were detected in the United States.
- So far in 2013, there have been 15 cases reported from 3 states (Illinois [1], Ohio [1], Indiana [13]).
- Most infections have been associated with prolonged exposure to pigs at agricultural fairs.
- Limited human-to-human spread of this virus has been detected in the past as well, but no sustained community spread of H3N2v has been identified at this time.
- CDC H3N2v website: <http://www.cdc.gov/flu/swineflu/h3n2v-cases.htm>